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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,196	08/02/2000	Gerhard A. Schneider	4396	9110
20350	7590	07/13/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			DINH, DUC Q	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/632,196

Applicant(s)

SCHNEIDER, GERHARD A.

Examiner

DUC Q. DINH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,21-30,38-42,47-53 and 56-60 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-18,21-30,38-42,47-53 and 56-60 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention

2. Claims 1-15, 21-30 and 56-60 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.. Claims 1 recites the limitation “a user-operable switch having first state to configured to select operation the electronic control device, a second state configured to select operation of the coherent light source, and a third state configured to the electronic control device and the coherent light source for substantially simultaneously operating the electronic control device and the coherent light source, which are dimensioned to from a substantially unitary device when at least one of the electronic control device or the coherent light source is operable”.

Although the specification as originally filed discloses, specifically, in Fig. 3a a selection switch 335 to toggle between operation of the laser pointer, the pointing device or a combination of a laser pointer and a pointing device (page 20, lines 5-7, page 21, lines 17-21). In the instant case when “one of the electronic control device or the coherent light source is operable” as cited in claim 1, the specification is not enabling as to how one of ordinary skill in the art would actually uses the switch in the third state for substantially simultaneously operating the electronic control device and the coherent light source.

The examiner examines the application as best understanding of the claimed languages.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7, 9-10, 16-17, 26-28, 38-42, 49-53 and 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Daniels (U. P. Patent No. 6,417,840 B1) in view of Stork et al. (U. S. Patent No. 6,275,174), hereinafter Stork 174'.

In reference to claim 1, Daniels discloses an integrated cordless mouse in Fig. 11 comprising a signal generator (corresponding to the electronic control device) and laser generator (coherent light source) which selectively communicates with a computer and which is also capable of transmitting a beam of laser light. In addition, Daniels discloses that the signals transmitted by a cordless mouse 10 to the computer are of necessity signals, which may be sent without a physical transmission line. Preferably, the mouse 10 sends infrared signals generated by the signal generator 41 in response to movements sensed by the mouse ball 26 and in response to operation of switches controlled by the operating buttons 14, 16. Alternatively, provided a suitable frequency band is used which does not disrupt operation of the computer, the signals from the signal generator 41 may be transmitted as radio frequency signals *satisfying to the claimed limitation radio frequency transmitter* (col. 3, line 35-45). Moreover, as shown in Fig. 11, a switch 30, having first state to select the operation of the mouse in a first state or the laser generator in the second state when at least one of the mouse or the laser is operable.

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Accordingly, Daniels discloses everything except the limitation “a switch having a third state configured to provide power substantially simultaneously to the electronic control device and the coherent light source for substantially simultaneously operating the electronic device or the light source when at least one of the device is operable”. Stork 174' discloses an input device in Fig. 2a and 2b, the region of the body of rotation not cover by the holding hand has in addition to the first embodiment a field with 3 keys (Function 5,6,7), with can operated by the free hand. In order to call up less frequently required special functions, Furthermore, a switch L is provided in this embodiment (col. 5, lines 60-66) for actuating the laser pointer. This implies that additional switch L can be used to actuate the laser pointer at the same time with other functions of the rotating knob (see col. 4, line 45 – col. 5, line 15).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Stork 174', i.e.: using the input device and the laser pointer at the same time in by modifying the switch 30 of Daniels device for simultaneously providing additional enhanced cursor control for the computer system with the laser pointer.

In reference to claim 56, Daniels discloses the control device is a touch pad in Fig. 8-9 as claimed.

In reference claims 57-59, Daniels discloses the switches 114, 116 and 12 in Fig.6 as claimed.

In reference to claim 60, Daniels discloses the mouse generator having first power source 81 and batter contact SW1 the laser generator having second power source 82 and a second battery contact and are configured to contract for sharing the power between the first power

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source and the second power source. Daniels discloses everything except the device is configured to be separable into a first portion and a second portion.

Absent a showing of critically and/or unexpected result, it would be obvious to one of ordinary skill in the art to make the laser pointer and the mouse of the combined device of Daniels and Stock 174' separable as desired as was judicially recognized with *Nerwin v. Erlichman*, 168, USPQ, 179, (PTO bd. of Int. 1969), which recognizes that separate of well known element is normally not desired toward patentable subject matter.

In reference to claim 16, see the rejection of claims 60.

In reference to claim 17, refer to rejection for the laser pointer as in claim 1.

In reference to claims 26-28, Daniels discloses in FIGS. 3, 4, a switch 30 is provided on a side 22 of the cordless mouse 10. While the switch 30 is shown to be on the side 22 to the left of the front surface 20, it is to be understood that the switch may be located anywhere on the mouse 10. The switch 30 functions to selectively allow transmission of the computer control signals produced by either of the buttons 14, 16 and/or the mouse ball 26 or transmission of the beam of light from the light generating apparatus 27 through the port 24. Specifically, with the switch 30 in its normal, under pressed state, the mouse 10 functions as a conventional cordless computer mouse and the signal generator 41 is enabled to transmit signals from the mouse ball 26 and the operating buttons 14, 16 to the computer. Upon depression of the switch 30, the signal generator 41 is disabled. Instead, the laser generator 42 is enabled and a beam of light

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from the laser generator 42, is transmitted through the port 24. FIG. 11 shows the electrical connection of the switch 30 to enable (EN) inputs of the signal generator 41 and the laser generator 42. As shown, the switch 30 selectively applies an enable signal to one or the other generators 41, 42 in accordance with whether it is depressed or not. Alternatively, as illustrated in FIGS. 10A and 10B, a switch 30' may be a toggle switch. Namely, the switch 30' may be pushed and then mechanically held into an A position, which enables the signal generator 41 or into a B position which enables the laser generator 42 (col. 3, line 67 - col. 4 line 19). In addition, Stork 174' discloses separate switch L for the laser light source.

In reference to claim 55, Daniels discloses pointing device is a mouse

Claims 49-53 are method claims associated with the above apparatus of claims and are rejected as the same set forth as applied to the above claims.

In reference to claims 2-5, 7, 9-10, Daniels Stork 174' discloses everything except for the location and/or arrangement of the control mechanism a light beam on the device housing.

Absent a showing of critically and/or unexpected result, it would be obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism an light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' as applied in claim 1 and further in view of Liu (U. P. Patent No. 6,133,907).

In reference to claims 6, Daniels and Stork 174' discloses everything except a lens of the coherent light source. Liu discloses a pointing device employing laser beam having a lens 16 in Fig. 2 as claimed.

It would have been obvious for one of ordinary skill in the art to provide the lens taught by Liu in the combination device of Daniels and Stork 174' for protecting the laser light source.

6. Claims 8, 11-15, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' as applied to claims 1-5 and 7-9 and 16 above, and further in view of Stork et al (U. P. Patent No. 6,181,329 B1), hereinafter Stork 329'.

In reference to claims 8, 11-13, Daniel and Stork 174' fail to discloses a writing mechanism and gyroscope system for the electrical control device. Stork 329' discloses an apparatus for tracking the location of a writing instrument comprises and three gyroscopes 126-128.

It would have been obvious for one of ordinary skill in the art for providing the Stork's 329' writing instrument to the device discloses by Daniels and Stork 174' for providing a convenient writing means for users using the input device.

It would have been also obvious for one of ordinary skill in the art at to provide the gyroscope system taught by Stork 329' in the device of Daniel and Stork 174' for sensing the position information of the device for the system.

In reference to claims 14-15, Daniels and Stork 174' discloses everything except for the location and/or arrangement of the control mechanism, the writing instrument and light beam source on the device housing.

Absent a showing of critically and/or unexpected result, it would be obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism an light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

In reference to claim 21, Daniel and Stork 174' fails to disclose radio-frequency receiver for the system. Stork 392' discloses a transceiver 140 for transmitting data from tracking sensor and other data to the remote computing device 175. Transceiver 140 may also receive data from remote computing device 175 (See Fig. 1).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to substitute the transceiver taught by Stork 329' with the transmitter disclosed by Daniels for providing two way communication for the system, i.e., transmitting data from the input device to the remote computer and for receiving data from remote computing system (col. 3, lines 30-37).

7. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' as applied to claim 1 and further in view of Hu (U. P. Patent No. 5,952,997).

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In reference to claim 22, Daniels and Stork 174' discloses everything except the electronic control comprises an optical pointing device. Hu discloses an optical mouse as claimed.

It would have been obvious for one of ordinary skill in the art to substitute the optical mouse taught by Hu for the conventional mouse of Daniels and Stork 174' to provide other optional input device as user's desire.

In reference to claims 23-25, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) [col.4, line 63-col.5, line 3] and configured to switch between the first and second states to supply power to the mouse or laser pointer as claimed.

8. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' as applied to claim 1, and further in view of Buchner et al. (U. S. Patent No. 5,532,753), hereinafter Buchner.

In reference to claims 29-30, Daniels and Stork 174' fail to disclose the power management unit to turn off at least one electronic device and the coherent light source in response to a predetermined time. Buchner disclose an input device 3 in Fig. 1 having operation member 3a, If the operation member 3a is released, the control picture disappears and the remote controller 3 is automatically switched from the operation mode to the power off or power save mode in a predetermined time after the operation member 3a is released (col. 5, lines 63-67).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Buchner in the device of Daniels and Stork 174', i.e.: turn

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of the power of the input device after the operation member is released in a predetermined of time, for saving power of the input device.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 38-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Daniels (U. S. Patent No. 6,417,840).

In reference to claims 38-39, Daniels discloses an integrated cordless mouse in Fig. 11 comprising a signal generator (**corresponding to the electronic control device**) and laser generator (**coherent light source**) which selectively communicates with a computer and which is also capable of transmitting a beam of laser light. In addition, Daniels discloses that the signals transmitted by a cordless mouse 10 to the computer are of necessity signals, which may be sent without a physical transmission line, the signals from the signal generator 41 may be transmitted as radio frequency signals satisfying to the claimed limitation radio frequency transmitter (col. 3, line 35-45). As shown in Fig. 11, a switch 30 corresponding to the switching means, having first state to select the operation of the mouse in a first state or the laser generator in the second state (col. 3, line 65 – col.4, line 25).

In reference claim 40, Daniels discloses the mouse is operated to switch between display images (col. 47-50).

In reference to claims 41-42, Daniels discloses the communication device may also be a mouse or a trackball as claimed (col. 4, lines 26-38).

In reference to claim 48, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) for the computer system as claimed [col.4, line 63-col.5, line 3].

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Liu (U. P. Patent No. 6,133,907).

In reference to claim 47, Daniels discloses everything except a lens of the coherent light source. Liu discloses a pointing device employing laser beam having a lens 16 in Fig. 2 as claimed.

It would have been obvious for one of ordinary skill in the art to provide the lens taught by Liu in the device of Daniels for protecting the laser light source

Response to Arguments

11. Applicant's arguments, see pages 12-18 of the Amendment, filed 04/18/05 have been fully considered but they are not persuasive. With respect to rejected under 35 U.S.C. 112, first paragraph, See the new 112 First Paragraph above. With respect to the arguments for claims 1 and 49. Daniels discloses switch 30 for selecting control between the mouse and the light source. Daniels does not disclose the switch that simultaneously operating the light source and the coherent light source. Stork 174' discloses an input device in Fig. 2a and 2b, the region of the body of rotation not cover by the holding hand has in addition to the first embodiment a field with 3 keys (Function 5,6,7), with can operated by the free hand. Furthermore, a switch L is

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provided in this embodiment (col. 5, lines 60-66) for actuating the laser pointer. This implies that additional switch L can be used to actuate the laser pointer at the same time with other functions of the rotating knob (see col. 4, line 45 – col. 5, line 15).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Stork 174', i.e.: using the input device and the laser pointer at the same time in by modifying the switch 30 of Daniels device for simultaneously providing additional enhanced cursor control for the computer system with the laser pointer. With respect to the argument related to the power switch regarding to claims 1 and 49, there is no such limitations in the recited claims. Furthermore, upon reconsideration of the indicated allowability of claims 16-18 and 38-42, 47-48 and 55 is withdrawn. The new rejections are provided to the claims 16-18 and 38-42, 47-48 and 55 is provided as above.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DUC Q DINH** whose telephone number is **(703) 306-5412** The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

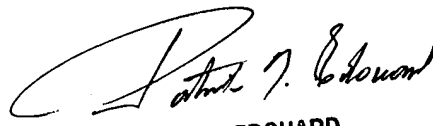
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Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,
Arlington, Va Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 305-4700.

DUC Q DINH
Examiner
Art Unit 2674

DQD
July 10, 2005



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER